O4CO 03-08-01
#2   OIPE

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              RAW SEQUENCE LISTING              DATE: 03/02/2001
              PATENT APPLICATION:  US/09/776,865   TIME: 13:48:32

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        5  <120> TITLE OF INVENTION: Methods for Preventing or Attenuating Pathoangiogenic Conditions
        7  <130> FILE REFERENCE: 22100-0100 46126-252687
C-->    9  <140> CURRENT APPLICATION NUMBER: US/09/776,865
C-->    9  <141> CURRENT FILING DATE: 2001-02-02
        9  <150> PRIOR APPLICATION NUMBER: US 60/179,870
       10  <151> PRIOR FILING DATE: 2000-02-02
       12  <160> NUMBER OF SEQ ID NOS: 4
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       30  gcgggagacg gtcgtccgaa caccggctcc ccggcatgcg tagaccggcg ggcggagcgg     180
       32  gctcactttg cgccaatcct acgagaactc ccagaactcc gcttccctag tccaacccaa     240
       34  gccagagttg cccacaccta ag atg gcg gcg ggg gcg atg aca ccg ccc cgc     292
       35                         Met Ala Ala Gly Ala Met Thr Pro Pro Arg
       36                          1               5                  10
       38  ccg gtc cag cca gct cgg ccc ggg ggc ttc ggg ctg tcg ggc cgg cgc     340
       39  Pro Val Gln Pro Ala Arg Pro Gly Gly Phe Gly Leu Ser Gly Arg Arg
       40              15                  20                  25
       42  tcc ctt ctc tgc cag gtg gcg agt aca cct gct cac gta ggc gtc atg     388
       43  Ser Leu Leu Cys Gln Val Ala Ser Thr Pro Ala His Val Gly Val Met
       44              30                  35                  40
       46  agg tct ccg gtt cga gac ctg gcc cgg aac gat ggc gag gag agc acg     436
       47  Arg Ser Pro Val Arg Asp Leu Ala Arg Asn Asp Gly Glu Glu Ser Thr
       48              45                  50                  55
       50  gac cgc acg cct ctt cta ccg ggc gcc cca cgg gcc gaa gcc gct cca     484
       51  Asp Arg Thr Pro Leu Leu Pro Gly Ala Pro Arg Ala Glu Ala Ala Pro
       52      60                  65                  70
       54  gtg tgc tgc tct gct cgt tac aac tta gca att ttg gcc ttt ttt ggt     532
       55  Val Cys Cys Ser Ala Arg Tyr Asn Leu Ala Ile Leu Ala Phe Phe Gly
       56  75                  80                  85                  90
       58  ttc ttc att gtg tat gca tta cgt gtg aat ctg agt gtt gcg tta gtg     580
       59  Phe Phe Ile Val Tyr Ala Leu Arg Val Asn Leu Ser Val Ala Leu Val
       60              95                  100                 105
       62  gat atg gta gat tca aat aca act tta gaa gat aat aga act tcc aag     628
       63  Asp Met Val Asp Ser Asn Thr Thr Leu Glu Asp Asn Arg Thr Ser Lys
       64              110                 115                 120
       66  gcg tgt cca gag cat tct gct ccc ata aaa gtt cat cat aat caa acg     676
       67  Ala Cys Pro Glu His Ser Ala Pro Ile Lys Val His His Asn Gln Thr
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68          125                  130                  135
70 ggt aag aag tac caa tgg gat gca gaa act caa gga tgg att ctc ggt     724
71 Gly Lys Lys Tyr Gln Trp Asp Ala Glu Thr Gln Gly Trp Ile Leu Gly
72     140                  145                  150
74 tcc ttt ttt tat ggc tac atc atc aca cag att cct gga gga tat gtt     772
75 Ser Phe Phe Tyr Gly Tyr Ile Ile Thr Gln Ile Pro Gly Gly Tyr Val
76 155                  160                  165                  170
78 gcc agc aaa ata ggg ggg aaa atg ctg cta gga ttt ggg atc ctt ggc     820
79 Ala Ser Lys Ile Gly Gly Lys Met Leu Leu Gly Phe Gly Ile Leu Gly
80             175                  180                  185
82 act gct gtc ctc acc ctg ttc act ccc att gct gca gat tta gga gtt     868
83 Thr Ala Val Leu Thr Leu Phe Thr Pro Ile Ala Ala Asp Leu Gly Val
84             190                  195                  200
86 gga cca ctc att gta ctc aga gca cta gaa gga cta gga gag ggt gtt     916
87 Gly Pro Leu Ile Val Leu Arg Ala Leu Glu Gly Leu Gly Glu Gly Val
88             205                  210                  215
90 aca ttt cca gcc atg cat gcc atg tgg tct tct tgg gct ccc cct ctt     964
91 Thr Phe Pro Ala Met His Ala Met Trp Ser Ser Trp Ala Pro Pro Leu
92     220                  225                  230
94 gaa aga agc aaa ctt ctt agc att tcg tat gca gga gca cag ctt ggg    1012
95 Glu Arg Ser Lys Leu Leu Ser Ile Ser Tyr Ala Gly Ala Gln Leu Gly
96 235                  240                  245                  250
98 aca gta att tct ctt cct ctt tct gga ata att tgc tac tat atg aat    1060
99 Thr Val Ile Ser Leu Pro Leu Ser Gly Ile Ile Cys Tyr Tyr Met Asn
100                 255                  260                  265
102 tgg act tat gtc ttc tac ttt ttt ggt act att gga ata ttt tgg ttt   1108
103 Trp Thr Tyr Val Phe Tyr Phe Phe Gly Thr Ile Gly Ile Phe Trp Phe
104             270                  275                  280
106 ctt ttg tgg atc tgg tta gtt agt gac aca cca caa aaa cac aag aga   1156
107 Leu Leu Trp Ile Trp Leu Val Ser Asp Thr Pro Gln Lys His Lys Arg
108     285                  290                  295
110 att tcc cat tat gaa aag gaa tac att ctt tca tca tta aga aat cag   1204
111 Ile Ser His Tyr Glu Lys Glu Tyr Ile Leu Ser Ser Leu Arg Asn Gln
112     300                  305                  310
114 ctt tct tca cag aag tca gtg ccg tgg gta ccc att tta aaa tcc ctg   1252
115 Leu Ser Ser Gln Lys Ser Val Pro Trp Val Pro Ile Leu Lys Ser Leu
116 315                  320                  325                  330
118 cca ctt tgg gct atc gta gtt gca cac ttt tct tac aac tgg act ttt   1300
119 Pro Leu Trp Ala Ile Val Val Ala His Phe Ser Tyr Asn Trp Thr Phe
120             335                  340                  345
122 tat act tta ttg aca tta ttg cct act tat atg aag gag atc cta agg   1348
123 Tyr Thr Leu Leu Thr Leu Leu Pro Thr Tyr Met Lys Glu Ile Leu Arg
124             350                  355                  360
126 ttc aat gtt caa gag aat ggg ttt tta tct tca ttg cct tat tta ggc   1396
127 Phe Asn Val Gln Glu Asn Gly Phe Leu Ser Ser Leu Pro Tyr Leu Gly
128             365                  370                  375
130 tct tgg tta tgt atg atc ctg tct ggt caa gct gct gac aat tta agg   1444
131 Ser Trp Leu Cys Met Ile Leu Ser Gly Gln Ala Ala Asp Asn Leu Arg
132     380                  385                  390
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134 gca aaa tgg aat ttt tca act tta tgt gtt cgc aga att ttt agc ctt        1492
135 Ala Lys Trp Asn Phe Ser Thr Leu Cys Val Arg Arg Ile Phe Ser Leu
136 395                 400                 405                 410
138 ata gga atg att gga cct gca gta ttc ctg gta gct gct ggc ttc att        1540
139 Ile Gly Met Ile Gly Pro Ala Val Phe Leu Val Ala Ala Gly Phe Ile
140                 415                 420                 425
142 ggc tgt gat tat tct ttg gcc gtt gct ttc cta act ata tca aca aca        1588
143 Gly Cys Asp Tyr Ser Leu Ala Val Ala Phe Leu Thr Ile Ser Thr Thr
144                 430                 435                 440
146 ctg gga ggc ttt tgc tct tct gga ttt agc atc aac cat ctg gat att        1636
147 Leu Gly Gly Phe Cys Ser Ser Gly Phe Ser Ile Asn His Leu Asp Ile
148             445                 450                 455
150 gct cct tcg tat gct ggt atc ctc ctg ggc atc aca aat aca ttt gcc        1684
151 Ala Pro Ser Tyr Ala Gly Ile Leu Leu Gly Ile Thr Asn Thr Phe Ala
152     460                 465                 470
154 act att cca gga atg gtt ggg ccc gtc att gct aaa agt ctg acc cct        1732
155 Thr Ile Pro Gly Met Val Gly Pro Val Ile Ala Lys Ser Leu Thr Pro
156 475                 480                 485                 490
158 gat aac act gtt gga gaa tgg caa acc gtg ttc tat att gct gct gct        1780
159 Asp Asn Thr Val Gly Glu Trp Gln Thr Val Phe Tyr Ile Ala Ala Ala
160                 495                 500                 505
162 att aat gtt ttt ggt gcc att ttc ttt aca cta ttc gcc aaa ggt gaa        1828
163 Ile Asn Val Phe Gly Ala Ile Phe Phe Thr Leu Phe Ala Lys Gly Glu
164                 510                 515                 520
166 gta caa aac tgg gct ctc aat gat cac cat gga cac aga cac                1870
167 Val Gln Asn Trp Ala Leu Asn Asp His His Gly His Arg His
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170 tgaaggaacc aataaataat cctgcctcta ttaatgtatt tttatttatc atgtaacctc     1930
172 aaagtgcctt ctgtattgtg taagcattct atgtcttttt ttaattgtac ttgtattaga     1990
174 tttttaaggc ctataatcat gaaatatcac tagttgccag aataataaaa tgaactgtgt     2050
176 ttaattatga ataatatgta agctaggact tctactttag gttcacatac ctgcctgcta     2110
178 gtcgggcaac atgaagtagg acagttctgt tgattttta gggccatact aaagggaatg      2170
180 agctgaaaca gacctcctga tacctttgct taattaaact agatgataat tctcaggtac     2230
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200 gggcgtggtg acgggcgcct gtaatcccag atactcagga ggctgaggta ggagaatcac     2830
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222 Ala Ser Thr Pro Ala His Val Gly Val Met Arg Ser Pro Val Arg Asp
223         35                  40                  45
226 Leu Ala Arg Asn Asp Gly Glu Glu Ser Thr Asp Arg Thr Pro Leu Leu
227     50                  55                  60
230 Pro Gly Ala Pro Arg Ala Glu Ala Ala Pro Val Cys Cys Ser Ala Arg
231 65                  70                  75                  80
234 Tyr Asn Leu Ala Ile Leu Ala Phe Phe Gly Phe Phe Ile Val Tyr Ala
235             85                  90                  95
238 Leu Arg Val Asn Leu Ser Val Ala Leu Val Asp Met Val Asp Ser Asn
239             100                 105                 110
242 Thr Thr Leu Glu Asp Asn Arg Thr Ser Lys Ala Cys Pro Glu His Ser
243         115                 120                 125
246 Ala Pro Ile Lys Val His His Asn Gln Thr Gly Lys Lys Tyr Gln Trp
247     130                 135                 140
250 Asp Ala Glu Thr Gln Gly Trp Ile Leu Gly Ser Phe Phe Tyr Gly Tyr
251 145                 150                 155                 160
254 Ile Ile Thr Gln Ile Pro Gly Gly Tyr Val Ala Ser Lys Ile Gly Gly
255                 165                 170                 175
258 Lys Met Leu Leu Gly Phe Gly Ile Leu Gly Thr Ala Val Leu Thr Leu
259             180                 185                 190
262 Phe Thr Pro Ile Ala Ala Asp Leu Gly Val Gly Pro Leu Ile Val Leu
263         195                 200                 205
266 Arg Ala Leu Glu Gly Leu Gly Glu Gly Val Thr Phe Pro Ala Met His
267     210                 215                 220
270 Ala Met Trp Ser Ser Trp Ala Pro Pro Leu Glu Arg Ser Lys Leu Leu
271 225                 230                 235                 240
274 Ser Ile Ser Tyr Ala Gly Ala Gln Leu Gly Thr Val Ile Ser Leu Pro
275                 245                 250                 255
278 Leu Ser Gly Ile Ile Cys Tyr Tyr Met Asn Trp Thr Tyr Val Phe Tyr
279             260                 265                 270
282 Phe Phe Gly Thr Ile Gly Ile Phe Trp Phe Leu Leu Trp Ile Trp Leu
283         275                 280                 285
286 Val Ser Asp Thr Pro Gln Lys His Lys Arg Ile Ser His Tyr Glu Lys
287     290                 295                 300
290 Glu Tyr Ile Leu Ser Ser Leu Arg Asn Gln Leu Ser Ser Gln Lys Ser
291 305                 310                 315                 320
294 Val Pro Trp Val Pro Ile Leu Lys Ser Leu Pro Leu Trp Ala Ile Val
295                 325                 330                 335
298 Val Ala His Phe Ser Tyr Asn Trp Thr Phe Tyr Thr Leu Leu Thr Leu
299             340                 345                 350
302 Leu Pro Thr Tyr Met Lys Glu Ile Leu Arg Phe Asn Val Gln Glu Asn
303         355                 360                 365
306 Gly Phe Leu Ser Ser Leu Pro Tyr Leu Gly Ser Trp Leu Cys Met Ile
307     370                 375                 380
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310 Leu Ser Gly Gln Ala Ala Asp Asn Leu Arg Ala Lys Trp Asn Phe Ser
311 385             390             395             400
314 Thr Leu Cys Val Arg Arg Ile Phe Ser Leu Ile Gly Met Ile Gly Pro
315             405             410             415
318 Ala Val Phe Leu Val Ala Ala Gly Phe Ile Gly Cys Asp Tyr Ser Leu
319             420             425             430
322 Ala Val Ala Phe Leu Thr Ile Ser Thr Thr Leu Gly Gly Phe Cys Ser
323             435             440             445
326 Ser Gly Phe Ser Ile Asn His Leu Asp Ile Ala Pro Ser Tyr Ala Gly
327     450             455             460
330 Ile Leu Leu Gly Ile Thr Asn Thr Phe Ala Thr Ile Pro Gly Met Val
331 465             470             475             480
334 Gly Pro Val Ile Ala Lys Ser Leu Thr Pro Asp Asn Thr Val Gly Glu
335             485             490             495
338 Trp Gln Thr Val Phe Tyr Ile Ala Ala Ala Ile Asn Val Phe Gly Ala
339             500             505             510
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362 cgccgtagct ccctgaaggc atc atg aag tcc ccg gtt tcg gac tta gcc ccg     113
363                        Met Lys Ser Pro Val Ser Asp Leu Ala Pro
364                         1          5                  10
366 agc gac ggc gag gag ggc tcg gac cgc aca ccg ctc ctg cag cgc gcc     161
367 Ser Asp Gly Glu Glu Gly Ser Asp Arg Thr Pro Leu Leu Gln Arg Ala
368             15              20              25
370 ccg cgg gcg gaa ccc gct cca gta tgc tgc tct gct cgt tac aac cta     209
371 Pro Arg Ala Glu Pro Ala Pro Val Cys Cys Ser Ala Arg Tyr Asn Leu
372             30              35              40
374 gca ttt ttg tcc ttt ttt ggt ttc ttc gtt ctc tat tca tta cgg gtg     257
375 Ala Phe Leu Ser Phe Phe Gly Phe Phe Val Leu Tyr Ser Leu Arg Val
376         45              50              55
378 aat ctg agc gtt gca cta gtg gac atg gtg gat tca aac aca act gcc     305
379 Asn Leu Ser Val Ala Leu Val Asp Met Val Asp Ser Asn Thr Thr Ala
380     60              65              70
382 aaa gat aat aga acg tcc tac gag tgt gca gag cat tct gct ccc ata     353
383 Lys Asp Asn Arg Thr Ser Tyr Glu Cys Ala Glu His Ser Ala Pro Ile
384 75              80              85              90
386 aaa gtt ctt cac aac caa acg ggt aaa aag tac cgg tgg gat gca gaa     401
387 Lys Val Leu His Asn Gln Thr Gly Lys Lys Tyr Arg Trp Asp Ala Glu
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VERIFICATION SUMMARY   DATE: 03/02/2001
PATENT APPLICATION: US/09/776,865   TIME: 13:48:33

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L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date